

What is Claimed is:

Sub a1 > 1. A rectification circuit comprising:
5 a diode full-wave bridge rectifier;
a freewheeling current path;
blocking means coupled between said rectifier
and said freewheeling current path for causing
freewheeling current of said bridge rectifier to
substantially flow through said freewheeling current
10 path.

2. A rectification circuit as recited in Claim
1, wherein said blocking means comprises a diode.

15 3. A rectification circuit as recited in Claim
2 wherein said freewheeling current path comprises at
least one freewheeling diode coupled substantially across
said bridge rectifier.

20 4. A rectification circuit as recited in Claim
2, wherein said freewheeling current path comprises a
plurality of freewheeling diodes coupled substantially in
series across said bridge rectifier.

25 Sub a2 > 5. A rectification circuit as recited in Claim
3, further comprising at least one capacitor, each said
capacitor coupled across a respective one of said
freewheeling diodes.

6 A rectification circuit as recited in Claim
3, further comprising at least one filtering circuit,
each said filtering circuit coupled to a respective one
of said freewheeling diodes to limit the rate of rise of
5 reverse voltage across said diodes.

7 A rectification circuit comprising:
a diode full-wave bridge rectifier;
a freewheeling current path;
10 a blocking diode coupled between said rectifier
and said freewheeling current path to cause freewheeling
current of said bridge rectifier to at least partially
flow through said freewheeling current path.

15 8 A rectification circuit as recited in Claim
7 wherein said freewheeling current path comprises at
least one freewheeling diode coupled substantially across
said bridge rectifier.

20 9 A rectification circuit as recited in Claim
7, wherein said freewheeling current path comprises a
plurality of freewheeling diodes coupled substantially in
series across said bridge rectifier.

25 10 A rectification circuit as recited in
Claim 8, further comprising at least one capacitor, each
said capacitor coupled across a respective one of said
freewheeling diodes.

11. A rectification circuit as recited in
Claim 8, further comprising at least one filtering
circuit, each said filtering circuit coupled to a
respective one of said freewheeling diodes to limit the
5 rates of rise of reverse voltage across said diodes.

12. A rectification circuit comprising:
an electrical load;
a plurality of first diodes coupled across a
10 first node and a second node in a bridge rectifier
configuration;
at least one second diode coupled between said
first node and a third node; and
a third diode coupled between said second node
15 and said third node.

Sub a³ 13. A rectification circuit as recited in
Claim 12, wherein said third diode is connected in order
to:
20 allow current rectified by said first diodes to
flow to said load; and
prevent at least some freewheeling current
flowing through said load from flowing through said first
diodes and instead cause said at least some freewheeling
25 current to flow through said second diodes.

14. A rectification circuit as recited in
Claim 13, further comprising at least one filtering
circuit, each said filtering circuit coupled to a
30 respective one of said second diodes to limit the rates
of rise of reverse voltage across said second diodes.